



## MEMORANDUM

**TO:** Mayor and Council

**FROM:** Joseph G. Pantalion, P.E., Director *JGP*  
Watershed Protection Department

**DATE:** June 8, 2016

**SUBJECT:** Proposed Drainage Utility Fee (DUF) Ordinance Changes

The Watershed Protection Department (WPD) is currently working on proposed updates to the City's existing drainage utility fee ordinance passed by City Council in June 2015. Three minor changes are proposed:

- 1) Incentives - add incentives for On-Site Stormwater Control Measures that exceed minimum development requirements and reduce a property's impervious cover impact,
- 2) Garage Apartments - revise the drainage charge requirements for utility customers in a garage apartment or other Accessory Dwelling Unit (ADU), and
- 3) Exemptions - clarify various exemptions to the City's drainage charge.

WPD is working with the Law Department to draft a proposed ordinance for Council consideration amending City Code Chapter 15-2 (Drainage Utility) to provide for these proposed changes.

### **Background**

In 1991, the City established its Drainage Utility program under the Texas Municipal Drainage Utility Systems Act (the "Act"). The Act authorizes communities to adopt a drainage charge to recover the costs of drainage utilities with a rate structure that charges individual lots or tracts for drainage service on a basis that is directly related to drainage, rather than the value of the property. The Act requires that the schedule of charges and the classification of benefitted properties be "nondiscriminatory, equitable, and reasonable" (Texas Local Government Code 552.047).

On June 25, 2015, City Council approved a new methodology to assess drainage charges. The charge is proportional to the impact that each specific property has on the City's drainage system. Drainage bills based on this new methodology were sent out starting November 1, 2015,

for October 2015 service. WPD also adopted new administrative rules that supplement and clarify the Drainage Utility Chapter of the City Code (15-2). Additional information related to the drainage charge, including FAQs, Administrative Rules, and a Find My Drainage Charge lookup tool, can be found at <http://www.austintexas.gov/drainagecharge>.

### **Proposed Revisions**

WPD recommends three ordinance modifications to be implemented during Fiscal Year 2017. The first proposed change acknowledges that on-site stormwater control measures (SCMs) reduce a property's impervious cover impact. It would allow customers who exceed minimum development regulations to receive an adjustment to their drainage charge. The other two proposed changes are minor cleanup items to clarify billing procedures. All three proposed ordinance revisions are currently being drafted collaboratively between WPD and Law to be presented at a future public hearing.

- 1) **Incentives** - This proposal addresses the ordinance requirement established by Council as part of last year's changes, "*The annual report shall include findings on the impact of green infrastructure on drainage and recommended strategies that could allow utility customers to reduce the drainage charge by reducing their property's impact on drainage. The recommended strategies shall address the potential for credits or discounts for innovative stormwater controls that exceed land development requirements and/or detention and water quality treatment minimum requirements*" (City Code 15-2-10).

WPD investigated whether offering additional incentives for on-site stormwater controls in the form of a rebate (one-time) or discount (ongoing) would improve drainage charge equity among customers or be justified by a reduction in the cost of providing service. As part of this evaluation, benchmarking from 48 communities showed that about two-thirds have discounts and about a third have rebates. The two large Texas cities that recently made DUF methodology changes and incorporated discounts were Houston and San Antonio. Houston has a program that offers a discount based on stormwater volume where a standard 55 gallon rain barrel provides a discount of about \$0.10 per month. San Antonio offers a discount for voluntary Low Impact Development water quality practices. Up to 30% of the fee is discounted based on how much runoff is treated on site. It is only available to non-residential customers. In addition, Austin Water Utility (AWU) currently offers rebate programs for rainwater harvesting and rainscapes, which are essentially rain barrels/cisterns and rain gardens, respectively. AWU offers these rebates because use of these devices may help with potable water conservation. From the benchmark review, stormwater discounts and rebates do not have standard or typical approaches, except that stormwater volume is often part of the metric in determining the amount of discount.

Many recent publications including EPA's *Flood Loss Avoidance Benefits of Green Infrastructure for Stormwater Management* (December 2015) provide an assessment on the benefits of smaller scale, on-site stormwater controls, often referred to as Green Infrastructure (GI). These studies largely reveal that the overall effects of GI on flooding are relatively small. However, they acknowledge benefits to water quality, reduced stream erosion, healthier ecosystems, greener/cooler cities and, groundwater recharge. A recent

WPD study of the Brentwood neighborhood also found that on-site SCMs had relatively small flood control benefits and relatively high costs, reaching similar conclusions to the results of the national study. On-site SCMs are generally accepted to have water quality and other benefits, but little flood control benefits. Since much of WPD's cost-of-service is related to flood control, the beneficial impact of GI or on-site SCMs to WPD expenditures is expected to be very small even with fairly extensive implementation. This led WPD to conclude that allocating departmental funds to a rebate program for green stormwater infrastructure is not recommended.

However, it was recognized that providing on-site stormwater storage has some quantifiable effect on drainage and thus relevant to the City's drainage charge method. There are valid concerns that capacity for certain SCMs may not be available during back to back storms. In addition, many small SCMs are not likely to be maintained well, and any incentive offered would result in a burden-shift to those not participating. Nonetheless, an incentive program should be developed taking into account the reduced effectiveness of SCMs for frequent events or maintenance concerns.

Therefore, WPD is suggesting a stormwater control discount program concept based on the relative impact of on-site stormwater controls to stormwater runoff. WPD recommends the program not only be applicable to controls such as rain barrels/cisterns and rain gardens, but also include sand filters, detention ponds, and other controls allowed by the Drainage or Environmental Criteria Manuals (DCM, ECM) as all these controls can be effective at reducing drainage impact.

A key component of the program, and specifically cited in the ordinance to investigate, is to consider only those controls that exceed land development requirements and/or detention and water quality requirements. New SCMs added to a previously permitted property would be eligible assuming the permitting process appropriately vetted the minimum required controls or allowed a fee in lieu of onsite controls or other approaches. Existing SCMs will need to prove regulatory requirements have been exceeded. For existing small controls, like rain barrels or rain gardens, a review of the subdivision or site plans to show those controls were not required for mitigation would be required to be eligible for a discount. For larger controls, like detention ponds, proof would require engineering calculations to demonstrate what portion of those controls exceed minimum development requirements.

To keep the application/verification process reasonably simple, the volume of the SCM is proposed as the metric to correlate to the amount of impervious cover mitigated and amount of drainage fee reduction. Using the same standard hydrologic relationships as the current drainage charge, approximately 0.6 square feet of impervious cover per gallon of stormwater control is proposed as the basis of the discount. So, a standard 55 gallon rain barrel would provide an impervious cover mitigation (reduction) of about 33 square feet. The corresponding fee reduction would vary depending on the property's impervious cover amount and percent, but for a median home the discount is about a \$0.22 per month compared to Houston's \$0.10 per month. A 1,000 gallon cistern would mitigate 600 square feet of impervious cover, discounting a median home's drainage charge by about \$3.63 per month.

An additional program component would include placing a limit on the amount of discount available per customer considering there are shared costs of service associated with citywide drainage systems. The limit is proposed to be a maximum impervious cover mitigation of 50% of the existing impervious cover on the property. For individual utility customers, the discount would be approved on 24-month cycles where they would need to complete subsequent renewal applications at the end of each term. This renewal application would include a signed statement of continued SCM function and an image submitted showing the SCM still in place. WPD does not intend to inspect the numerous small scale SCMs included in the program on a citywide basis, but will reserve the right to occasionally audit a small percentage to help verify functionality.

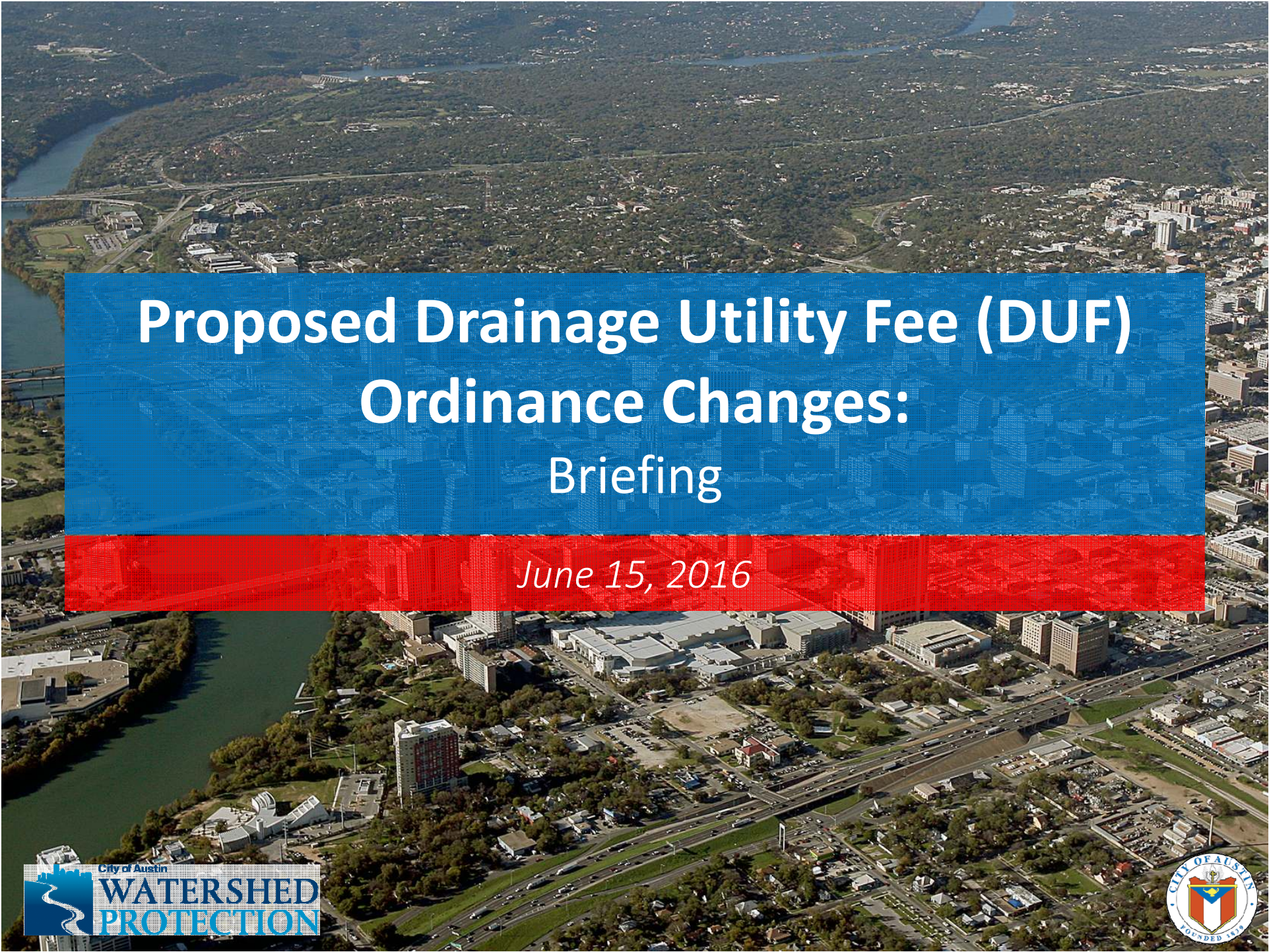
WPD staff are working to finalize the details of the drainage charge stormwater control discount program, which would be presented as future Drainage Charge Administrative Rules or other policy documents if ordinance changes are approved by Council.

- 2) Garage Apartments – This proposal revises drainage charge requirements for utility customers in a garage apartment or other Accessory Dwelling Unit (ADU). Currently, when there are two utility customers on a single family property, the current ordinance requires the bill be divided equally thus requiring the garage apartment or ADU customer to pay half. The proposed ordinance would allow the entire charge to be assessed to the primary residence.
- 3) Exemptions – This proposal is to clarify treatment of various exemptions to the drainage charge. Per State Code, State and Higher Education agencies are always exempt from a municipal drainage charge. However, the City Code states those agencies are only exempt if they “own and occupy” the property. This proposed revision is to revise the City Code to match the State Code requirements. Additionally, County and Independent School Districts (ISDs) are also exempt (only per current City Code) if they “own and occupy”. This proposed revision would also modify treatment for County and ISD agencies to be identical to State and Higher Education agencies.

We look forward to reviewing this information with the Council during the upcoming ordinance adoption process. Should you have any questions or require additional information, please do not hesitate to contact me at (512) 974-3438 or Saul Nuccitelli at (512) 974-6550.

CC: Marc A. Ott, City Manager  
Sue Edwards, Assistant City Manager  
Elaine Hart, Chief Financial Manager, FSD





# Proposed Drainage Utility Fee (DUF) Ordinance Changes: Briefing

*June 15, 2016*



# Presentation Outline

- Incentives for On-Site Stormwater Control Measures
- Other Proposed DUF Ordinance Changes
  - Garage Apartment revision
  - Exemption revision



# Incentives for On-Site Stormwater Control Measures: Discussion and WPD Staff Recommendations

*June 15, 2016*





# Ordinance Requirement

## § 15-2-10 - ANNUAL REPORT.

The director shall provide an annual report of the drainage utility revenues, expenses, and programs to the city council. The annual report shall include findings on the impact of green infrastructure on drainage and recommended strategies that could allow utility customers to reduce the drainage charge by reducing their property's impact on drainage. The recommended strategies shall address the potential for credits or discounts for innovative stormwater controls that exceed land development requirements and/or detention and water quality treatment minimum requirements.

- **What can properties do to reduce their drainage charge?**
- **What additional incentives would be justified?**
  - Does providing incentives improve equity among customers?
  - How do certain strategies reduce WPD cost-of-service?



# Range of Options

- **Currently Available to reduce Drainage Charge**
  - Reduce Impervious Cover
  - Adjust City's current estimate of Impervious Cover
  - Wood decks count as 50% Impervious if water can fall through
  - Permeable Pavers and Porous Pavement Credit
- **Other Currently Available Incentives or Cost-Sharing Options**
  - Austin Water Utility (AWU) Rainwater Harvesting and Rainscape Rebate Programs
  - Regional Stormwater Management Program (RSMP)
  - Public-Private Partnerships
- **Potential Incentive Options for on-site controls that meet or exceed minimum requirements**
  - Stormwater Control Rebate - WPD could participate via cost-sharing with existing AWU Rebate programs
  - Drainage Utility Fee (DUF) Discount – WPD could implement new discount program for certain stormwater controls

# Evaluation of Potential SCM Incentives

- **Imagine Austin calls for use of Green Stormwater Infrastructure to Integrate Nature into the City**
- **Types of Stormwater Control Measures (SCMs):**
  - Rain Barrels, Rain Gardens, Infiltration Trenches or other stormwater controls (including detention ponds and other traditional controls)
- **Only provide incentives for SCMs that exceed regulatory requirements**
  - New/additional SCMs – qualify if property is already permitted (met minimum requirements at the time of development)
  - Existing SCMs - will need to prove exceeds regulatory requirements
    - For small controls, like rain barrels, proof would be check of subdivision or site plans to show those controls were not required
    - For larger controls, like detention ponds, proof would require engineering calculations to demonstrate amount that exceeds requirements



# Evaluation of Potential SCM Incentives

- **Benchmarking**

- Of 48 communities benchmarked, about 2/3 have discounts, 1/3 have rebates
- Two TX Cities with recent DUF changes – Houston and San Antonio have SCM discounts
  - Houston Discount Program – Nominal by volume \$0.10/barrel/month
  - San Antonio – Up to 30% of variable charge, available to only commercial

- **Equity and Cost of Service Assessment**

- Recent EPA report has quantified some flood benefits from Green Infrastructure
- Austin's Brentwood study showed on-site SCMs had relatively small flood control benefits and high costs
- On-site SCMs generally accepted to have water quality benefits, but little flood control benefits
  - Capacity may not be available in back-to-back storms
  - Cost of Service benefit to Drainage Utility expected to be very small
- Any Incentive results in a burden-shift to those not participating

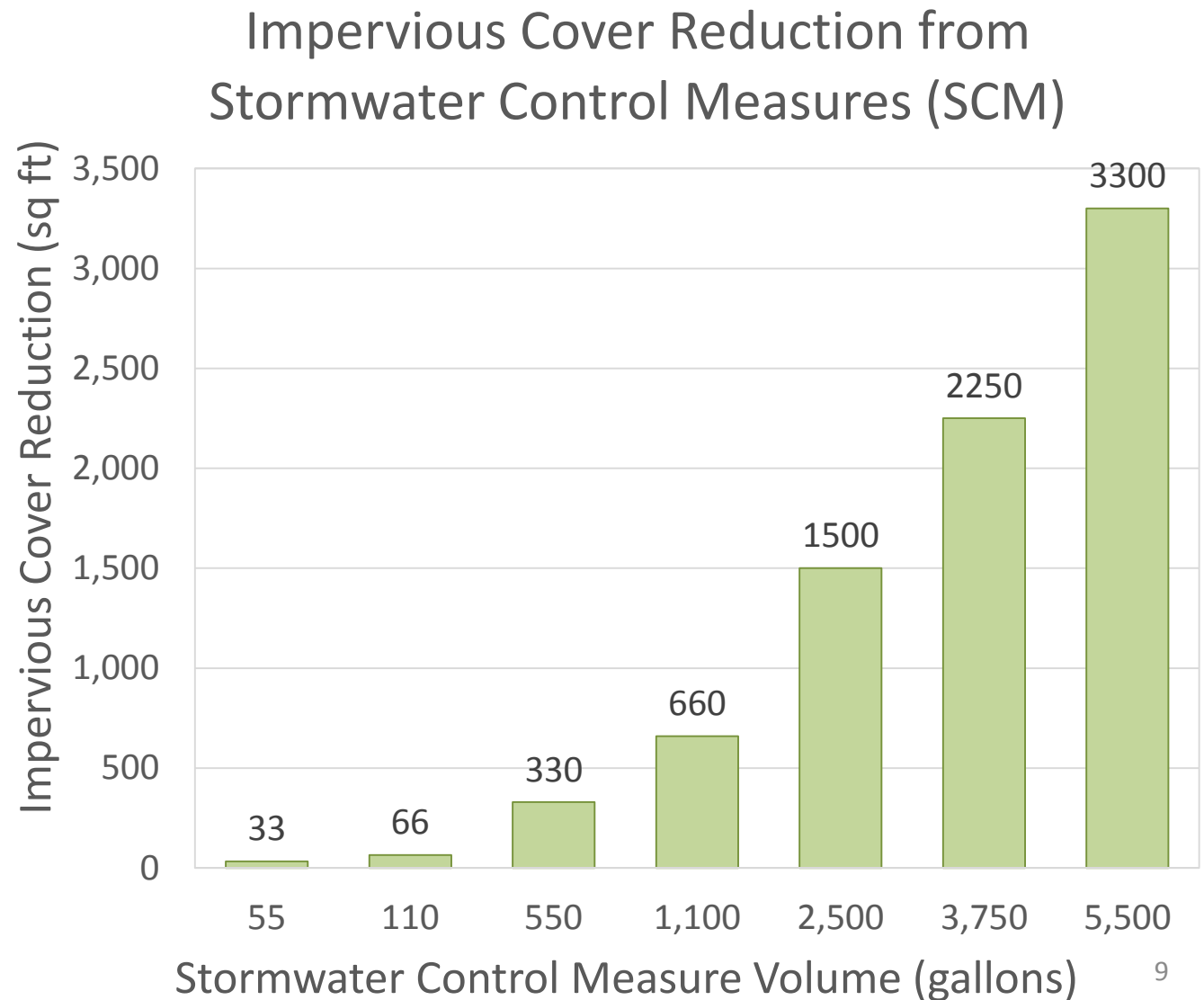
# Incentives for On-site Stormwater Control Measures (SCMs)

Options Considered	Considerations	Benefit to Cost-of-Service	Cost to Drainage Utility
<b><u>Option 1:</u></b> No Additional Incentive	<ul style="list-style-type: none"> <li>- Concern of drainage charge fairness</li> </ul>	None	None
<b><u>Option 2:</u></b> Rebate for SCMs	<ul style="list-style-type: none"> <li>- Rewards good behavior, improves awareness</li> <li>- Helps less affluent afford SCMs</li> <li>- Not cost-effective in reducing flood and water quality impact</li> </ul>	Very Low	Low
<b><u>Option 3:</u></b> Discount for SCMs	<ul style="list-style-type: none"> <li>- Rewards good behavior, improves awareness</li> <li>- Reduces concern of drainage charge fairness</li> <li>- Nominal rate change expected (\$0.03/month for the median single family customer)</li> </ul>	Very Low	Very Low



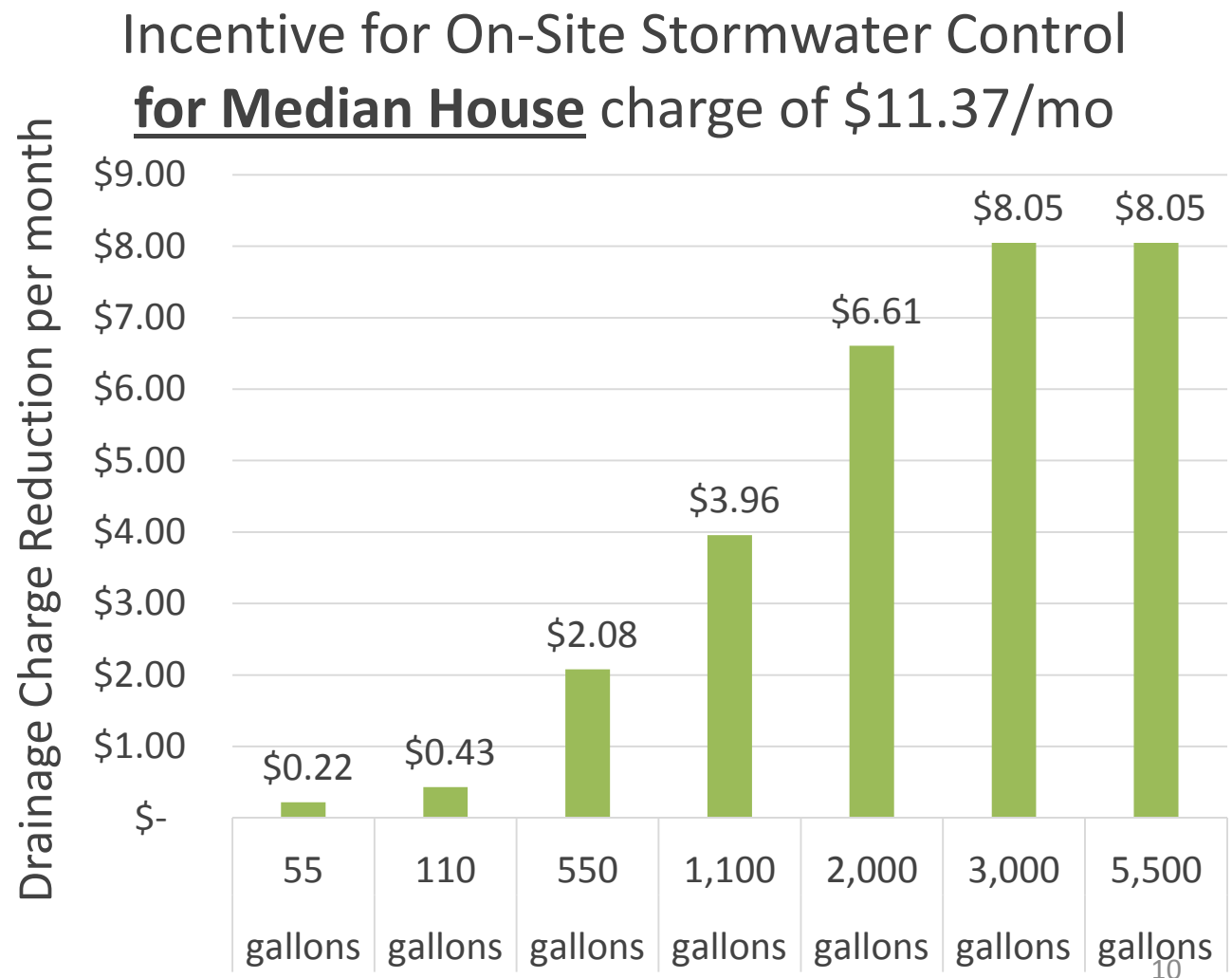
# Discount – Potential Program Outline

- Discount based on capture volume offsetting runoff from Impervious Cover (IC)
- Available to all land uses
- Discount limit to 50% of property's IC
- Discount renewal every 2 years by providing proof of continued function to minimize verification efforts



# Discount – Potential Program Outline

- Volume of one standard 55 gal Rain Barrel translates to \$0.22 per month savings
- 3,000 gal cistern could negate up to half the IC, thus 69% of the charge, though installation cost ~\$3,500
- Based on doubling prior AWU participation, annual discount total estimated at \$200,000

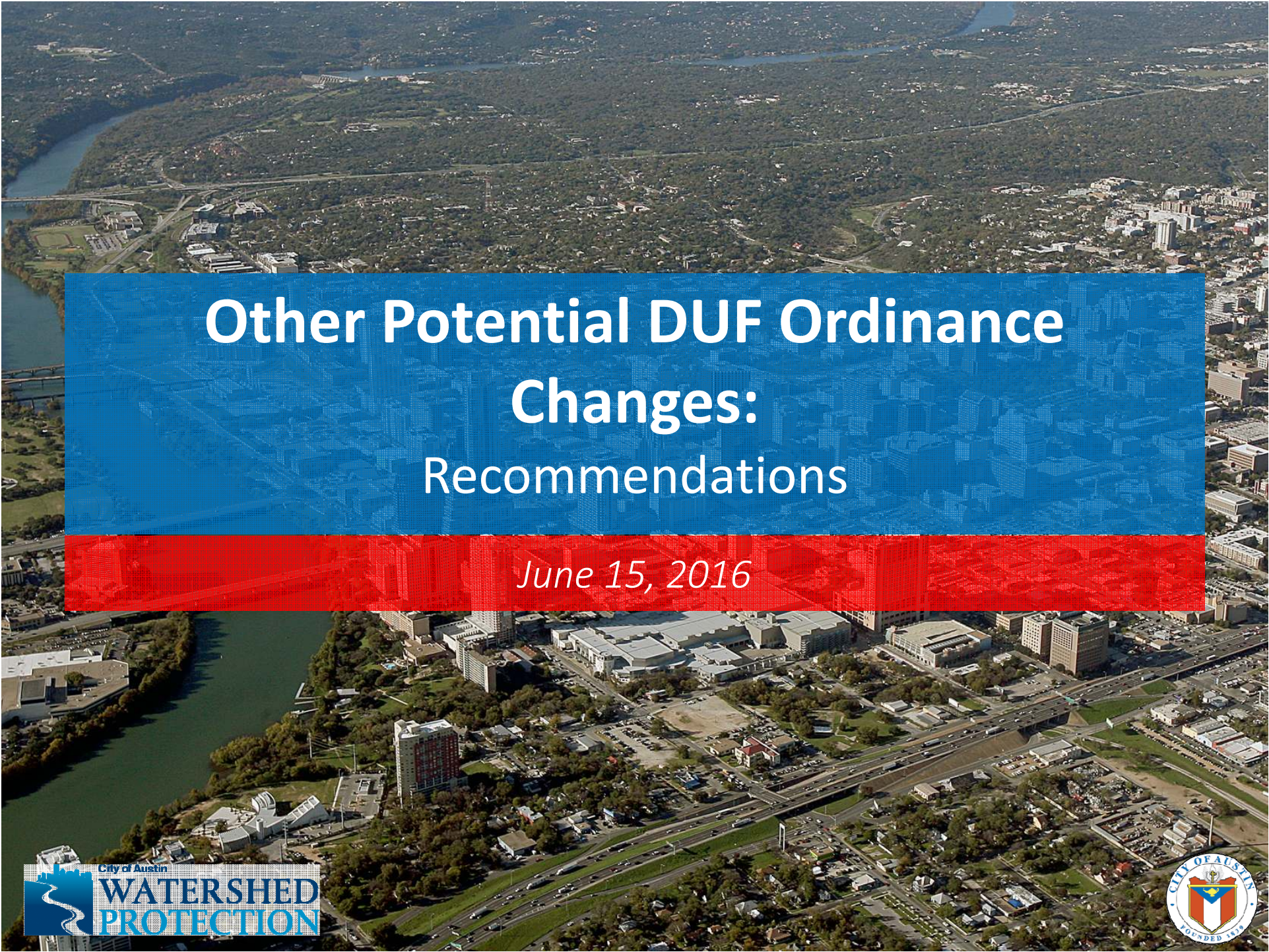




# Incentives for On-site Stormwater Control Measures

- Recommendations
  - Continue Education on Options to Reduce Impervious Cover
    - Improve website information on available options
    - Develop promotional materials on available options
    - Present to most-affected groups
  - Do not implement Rebates
    - Existing AWU program in place, but not cost-effective way to reduce stormwater impacts
    - Would not require ordinance change (as line item in budget)
  - Implement Discounts
    - Improves equity on drainage charge, but little benefit to drainage system
    - Will require ordinance change (as drainage charge recalculation)





# Other Potential DUF Ordinance Changes: Recommendations

*June 15, 2016*



# Potential Ordinance Changes

## 1) § 15-2-8 (C) (1) – Billing (Garage Apartment Update)

- Current Status
  - If the garage apartment has a separate utility account, must pay half of drainage charge (regardless of size/impact)
- Proposal
  - Send charge to owner/main utility customer for entire property
- Advantages
  - Improves equity by not requiring smaller garage apartment to pay half
- Disadvantages
  - May deal with higher bill concerns for some customers (at the main house) unaware they were paying only half the charge

# Potential Ordinance Changes

## 2) § 15-2-13 – Exemptions

(Clarify treatment of various exemptions)

- Current Status
  - City Code provides drainage charge exemption if the “property is owned and occupied”. State Code requires exemption of State and Higher Education agencies, regardless of ownership or occupancy.
- Proposal
  - Rephrase City Code to match State Code requirements
  - Expand exemption for County/ISDs agencies to “owned or occupied”
- Advantages
  - Removes conflict between City/State Codes and provides County/ISDs same exemption as State/Higher Ed
- Disadvantages
  - Change for County/ISDs expands their exemption up to \$40k annually



# Questions?

Saul Nuccitelli

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